Canon

Mini DV

Precision-Engineered
Genuine Canon
Video Lens

optura 300

DIGITAL VIDEO CAMCORDER

Everything is yours

DiG!C DV

www.canondv.com

Mac

Designed for Microsoft® Windows® XP

Intelligent...

The OPTURA 300 makes having the best of everything a reality. Offering unparalleled expertise in video and digital photography, it puts cutting edge performance in the palm of your hand. Its sophisticated, streamlined design makes it compact enough to carry anywhere. Dreams materialize before your very eyes, as two imaging worlds are seamlessly linked together with stunning detail and unprecedented realism. Sight and sound have been elevated to the pinnacle of perfection.

High Resolution 2.0 Megapixel CCD

Mini DV Digital Video Cassette

The OPTURA 300 features a robust 1/3.4 inch 2.0 megapixel CCD. Combined with a razor-sharp, megapixel compatible lens and image stabilization, the camcorder creates outstanding quality video and photos. A photo is recorded on a memory card at an image size of 1632 x 1224 pixels.

MEGA PIXEL

RGB Primary Color Filter

In addition to achieving higher resolution, the OPTURA 300's 2.0 Megapixel CCD integrates an RGB Primary Color Filter which separates light passing through the lens into individual red, green and blue color components, similar to professional camcorders. As a result, the OPTURA 300 achieves more accurate color reproduction with finer gradations than models using a conventional complementary color filter. The difference is especially noticeable, for instance, in skin tones and scenes with a dominant color such as sunsets, a ski slope or a forest.

RGB Primary Color Filter

DIGIC DV

DIGIC DV is a system for achieving superior video and photographic images. Canon's expertise in imaging and electronics is flawlessly blended together, resulting in outstanding performance. It offers substantial benefits in color reproduction. DIGIC DV makes it possible to achieve accurate color for both video and digital photos. Since video and photos have different color requirements, DIGIC DV utilizes two different color techniques to maximize video quality on a TV and still image quality for print or computer display.

VIC

Embracing the industry's latest and most sophisticated technology, Canon camcorders feature an exclusive connection circuit, called VIC. VIC is a virtual powerhouse. Traditionally, multiple chips were needed to perform the camcorder's input and output functions. However VIC manages it all with one single chip. The result is seamless connectivity whether you are connecting to a computer, TV, or VCR.

Genuine Canon Optics: 10x Optical Zoom Lens (40-200x Digital Zoom)

What sets a Canon camcorder apart from all the others? It's the only camcorder made by a company renowned for high-quality professional optics. Our vast expertise in designing and crafting precision lenses for 35mm and broadcast TV cameras also goes into every camcorder lens we make. The OPTURA 300's optical zoom lens delivers superb definition and contrast, taking full advantage of the DV format. The digital zoom extends the camcorder's magnification revealing details too small to see with the naked eye.

Impressive...

Image Stabilizer

A high quality image stabilization system corrects camcorder shake instantly, so your videos always look smooth, steady and natural even when shooting hand-held at full telephoto. Canon's image stabilization system is even effective while panning and zooming.

Image Stabilizer ON

Image Stabilizer OFF

IMAGE STABILIZER

2.0 Megapixel High-Resolution Photos

The OPTURA 300 features advanced image processing, for capturing stunning, 2.0 Megapixel (1632 x 1224 pixels) photos onto the included memory card. They may be captured at a variety of different image qualities and compression sizes (Superfine/ Fine/Normal).

Digital Photo Mode

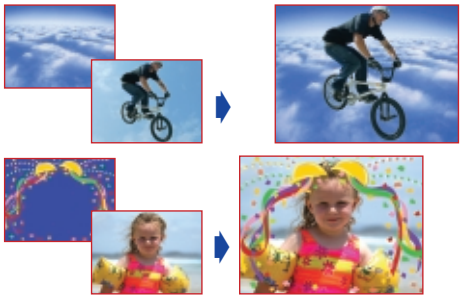
For added flexibility, you may take up to 700 still images on a single MiniDV tape (in SP Mode). The camcorder records the photos for approximately 6 seconds, as well as recording the sound for your verbal notes or narration. You can search through the recorded tape for your photos using the supplied remote control.

Simultaneous Photo Recording

While recording video, the OPTURA 300 is able to simultaneously capture VGA quality (640 x 480 pixels) digital photos onto a memory card. This is perfect for those who want to capture e-mail ready photos, without interruption.

SD Memory Card and MultiMediaCard

The OPTURA 300 expands video possibilities with a built-in slot for an SD (Secure Digital) Memory Card or MultiMediaCard for capturing high-resolution digital photos or MPEG-4 movie clips. Easily transfer images to your PC directly from the camcorder using USB and IEEE1394. Produce effects not possible with just a cassette using the Card Mix Effects. Choose one of the sample images provided on the supplied SD Memory Card (such as picture frames, backgrounds and animations) and combine it with the live video recording.



SD MultiMediaCard

MPEG-4 Movie

You can record movies with sound in MPEG-4 format onto a memory card. Movies in MPEG-4 format can be easily downloaded to a computer and attached to e-mail messages. You may choose to record in 352 x 288 pixels or 176 x 144 pixels.

DV Messenger2

DV Messenger

With **DV Messenger2**, you can use your Canon camcorder for Internet Video Chat with Microsoft Windows Messenger through USB or IEEE1394. Control the zoom and focus of your camcorder or the person you are chatting with. Preview thumbnails and transfer photos. Watch and control the video playback of either camcorder - all from your computer. When used in conjunction with the OPTURA 300's NETWORK mode, you can access your camcorder at home from a remote location. NETWORK mode also makes it possible to switch either camcorder's mode (CAMERA to VCR, TAPE to CARD) through the computer, instead of manually switching it on the camcorder.

DV Terminal (IEEE1394)

canon connects
plug and edit

IEEE1394 DV Terminal

An IEEE1394-compliant DV terminal lets you connect the OPTURA 300 to a DV-compatible computer or another Canon DV camcorder. Transfer your digital movies to your computer's hard disk, edit your scenes, then use them to create high-impact Web sites, video e-mail, interactive CDs and DVDs, or a personal video album.

USB Terminal

Allows high-speed transfer of images from your SD Memory Card or MultiMediaCard to your computer. By using the USB cable and software provided, you can process and organize your images on your PC. You can also select the USB connection mode and use the camcorder like a card reader/ writer.

CERTIFIED USB

Included Software

The OPTURA 300 includes software for image management and editing: **ZoomBrowser EX** (Windows) and **ImageBrowser** (Macintosh) which let you easily download, browse, archive, and retouch your photos. Automatically resize images and attach them to e-mail, arrange them for printing, and add text.

For a Truly Unique Imaging Experience

Built-in Flash

The built-in flash fires according to the brightness of the surrounding area. Use it to illuminate your subjects when shooting still images of night scene, indoor or in other dark places. There are 4 modes: Auto, Red-eye reduction Auto, Flash on, Flash off.

Analog Line-In/Converter

You can send an analog video signal from a TV, VCR or a camcorder into the OPTURA 300 and record it onto a DV tape, or convert the analog signal into digital signal, for direct transfer to digital video devices or computers equipped with a IEEE1394 terminal*.

*The Analog to Digital Converter may not function depending on the software used.

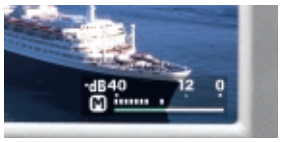
PCM Digital Sound

The OPTURA 300 offers two digital modes, 16-bit and 12-bit. You can select 16-bit mode for high-quality, CD-equivalent stereo sound, or 12-bit to record only two of four channels, leaving two channels free for you to record additional sound later.

PCM STEREO

Manual Audio Control

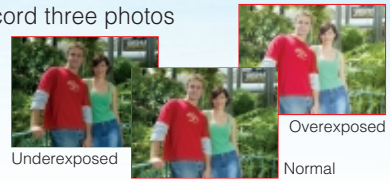
For complete control, the OPTURA 300 offers manual audio adjustment. The audio level can be monitored in the viewfinder or LCD view screen.



Actual Size

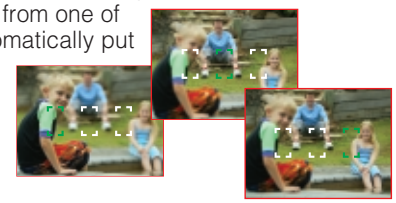
Auto Exposure Bracketing

This feature allows you to record three photos (normal, underexposed and overexposed) simply by pressing the PHOTO button once.



Selectable Focusing Points

Sometimes, the subject we want to photograph is not in the center of the frame. Choose from one of three focusing points to automatically put the subject you want into sharp focus.



Continuous Shooting Mode

The OPTURA 300 features a continuous shooting mode, allowing you to capture a rapid succession of photos. Shoot up to 30 images at 3 frames per second in VGA (640X480) size. This function is linked with the built-in flash, so continuous shooting is possible even even in dark locations.

Direct Print Choices

The camcorder offers flexible connectivity with a variety of printers. Connect your camcorder to a Canon CP-Series Card Photo Printer (CP-10, CP-100/200/300) or Canon Bubble Jet Direct Printer, without even connecting a computer. A single cable connects the printer to the OPTURA 300 and you can perform trimming and other functions right from the camcorder. Choose from a range of different paper sizes with options for borderless or bordered prints. The OPTURA 300 can also connect to any PictBridge compliant printer.

Exif Print

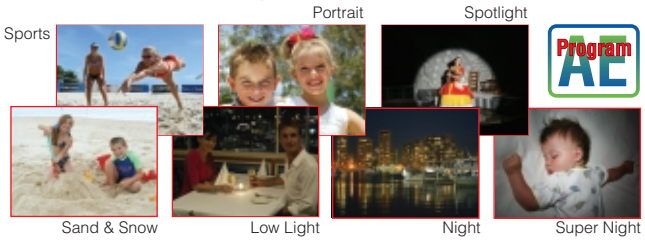
The OPTURA 300 supports Exif Print (2.2), a worldwide standard that enhances communication between digital cameras and printers. At the time of shooting, vital camcorder settings and scene data are recorded with the image, resulting in realistic and reliable color reproduction. Poor lighting or mistakes can also be corrected, allowing photos to be even better than the originals.

Flexible LCD View Screen and Color Viewfinder

The bright 2.5” LCD view screen makes it easy to compose sensational shots without having to squint into the viewfinder. You can rotate the screen for high- or low-angle shots, or turn it around 180° to record yourself. When you’re done shooting, the screen is perfect for reviewing your scenes.

Program Auto Exposure

While the Easy Recording mode is fine for most shooting situations, the camcorder also includes additional pre-programmed auto exposure modes (Auto, Sports, Portrait, Spotlight, Sand & Snow, Low Light, Night and Super Night mode), each carefully designed to give you the best possible image results under special shooting conditions.



Night Mode and Super Night Mode

Even when the light has faded, you can keep on shooting with the OPTURA 300’s Night and Super Night mode. The camcorder uses the Night mode to select the ideal shutter speed and sensitivity combination to brighten up the scene, without sacrificing color. In the Super Night mode, the assist lamp lights up to illuminate the subject allowing you to capture the action without turning the lights on.

16:9 Widescreen Mode

You can record high-resolution videos in the 16:9 format for widescreen TVs.

My Camera Function

Personalize your camcorder by customizing the start-up image and the sound it makes for start-up, shutter, self-timer and other operations. Choose a start-up image from the included software CD.

StitchAssist

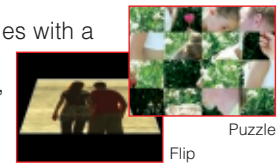
By using the StitchAssist Mode, you can create magnificent panoramas. Shoot your landscape, and transfer them to your computer. Then simply select and arrange your images in the correct order, and the supplied PhotoStitch software does the rest, aligning, overlapping and cropping the separate images to form one ultra-wide panoramic still image.

Digital Effects

Show your creativity by using the special effects and digital faders available with the OPTURA 300. A wide selection of faders and special effects will add visual appeal and greater imaging variety.

Faders

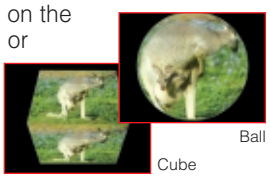
Add a variety of transitions to your movies with a fade to or from black. Choose from Fade Trigger, Wipe, Corner, Jump, Flip, Puzzle, Zigzag, Beam and Tide.



Special Effects

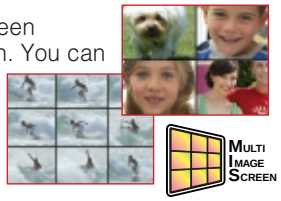
For a more creative look, you can switch on the following digital effects during recording or playback: Art, Black & White, Sepia, Mosaic, Ball, Cube, Wave, Color Mask or Mirror.

*In Card mode: Only black and white is available.



Multi-image Screen

Divide your screen into four, nine or sixteen pictures with the Image Capture function. You can choose the speed at which the images are captured: Manual, Slow, Moderate or Fast.



- **Lithium Ion Battery**
- **S-Video Input/Output**
- **Microphone Terminal**
- **Remote Control Included**
- **Built-in Speaker**
- **Superb Playback Function**
- **AV Insert and Audio Dubbing**
- **Self-Timer**
- **Photo Search/Date Search**
- **Time Code/Data Code**
- **Record Search & Review**
- **Confirmation Beep**
- **Zero Set Memory**
- **World Clock**

Pictures simulated

Optional Accessories

Lithium Ion Battery Packs
Extra batteries for use with the camcorders.

Battery pack	Maximum recording time	
	using viewfinder	using LCD screen
BP-407 (supplied, single-capacity)	75 min.	60 min.
BP-406 (optional, single-capacity)	70 min.	55 min.
BP-412 (optional, double-capacity)	120 min.	100 min.
BP-422 (optional, triple-capacity)	230 min.	190 min.

TL-H30.5 Tele-converter
Increases focal length by 1.9x.

FS-30.5U Filter Set
Includes neutral density (ND 8) filter and MC protector.

Adapter Bracket SA-1
This bracket lets you attach an external microphone or VL-10Li video light.

WD-H30.5 Wide-converter
Gives wide-angle coverage at 0.7x.

VL-10Li Battery Video Light
Powerful 10 W illumination. A BP-900 series battery attaches directly, so operation is cable-free.*
* A 900 series charger is required.

CB-400 Car Battery Adapter
Charges BP-400 series battery packs from a car cigarette lighter socket.

CA-400/CA-410 Compact Power Adapter
Charges BP-400 series battery packs from a household power source.

SC-1000 Soft Carrying Case

Genuine Leather

SC-A50 Soft Carrying Case

DVM-E60/DVM-E80 Digital Video Cassette

DVM-CL Digital Video Head Cleaning Cassette

Use of genuine Canon accessories is recommended: This product is designed to perform optimally when used with genuine Canon accessories. Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

Availability differs from area to area.

This mark identifies genuine Canon video accessories. When you use Canon video equipment, we recommend Canon-brand accessories or products bearing the same mark.

Specifications

Power supply (rated)	7.4 V DC
Power consumption	Using viewfinder: 4.1 W Using LCD screen: 5.1 W
Television system	EIA standard (525 lines, 60 fields) NTSC color signal
Video recording system	2 rotary heads, helical scanning DV system (Consumer digital VCR SD system); Digital component recording
Audio recording system	PCM digital sound: 16 bit (48kHz/2ch), 12 bit (32kHz/4ch)
Image sensor	1/3.4" CCD (charge coupled device), approx. 2,200,000 pixels (effective pixels: tape: approx. 1,230,000 pixels, card: approx. 2,000,000 pixels)
Tape format	Videocassettes bearing the (MiniDV) mark
Tape speed	SP: 0.74 ips (18.81 mm/s); LP: 0.49 ips (12.56 mm/s)
Maximum recording time (with an 80 min. cassette)	SP: 80 min., LP: 120 min.
Fast forward/rewind time	2 min. 20 sec. (with a 60 min. cassette)
Lens	F1.8-2.4, 10x power zoom, f=4.7-47 mm
Focusing system	TTL autofocus, manual focusing possible
Minimum focusing distance	3.3 ft. (1 m), 0.39 in. (1 cm) on maximum wide angle
Maximum shutter speed	1/2,000 (1/250 when using a memory card)
Minimum illumination	1.7 lx using the Night mode
Recommended illumination	More than 100 lx
Filter diameter	30.5 mm
Viewfinder	0.33 inch, color LCD (approx.113,000 pixels)
LCD screen	2.5 inch (approx. 200,000 pixels)
Microphone	Stereo electret condenser microphone
Recording media	SD Memory Card, MultiMediaCard
Number of recording pixels	Still image: 1632 x 1224 pixels, 1280 x 960 pixels, 640 x 480 pixels Movie: 352 x 288 pixels, 176 x 144 pixels
File format	Design rule for Camera File system (DCF), Exif 2.2 compliant, Digital Print Order Format (DPOF) compliant (only images marked for printing)
Image format	Still image: JPEG (compression mode: Superfine/Fine/Normal) Movie: MPEG-4
Estimated SD Memory Card SDC-8M capacities*	1632 x1224: Superfine 3 images/Fine 5 images/Normal 10 images, 1280 x 960: Superfine 5 images/Fine 9 images/Normal 16 images, 640 x 480: Superfine 34 images/Fine 50 images/Normal 84 images *The actual number varies depending on the images. Sample images recorded on the supplied SD Memory Card are to be included in the total number.
Maximum continuous shots	1632 x 1224: Flash on/off: 10 images (2 frames/sec.), 1280 x 960: Flash on: 10 images (2 frames/sec.); Flash off: 10 images (3 frames/sec.), 640 x 480: Flash on: 30 images (2 frames/sec.); Flash off: 30 images (3 frames/sec.)
USB terminal	mini-B (USB 2.0 compliant)
DV terminal input/output	Special 4 pin connector (based on IEEE1394)
Video terminal	1 Vp-p/75 ohms unbalanced
S-video terminal	1 Vp-p (Y signal), 0.286 Vp-p (C signal)
Audio terminal	Input level: -10 dBV/at least 40 kohms, unbalanced; Output level: -10 dBV (47 kohms load), less than 3 kohms, unbalanced
MIC terminal	ø3.5mm stereo mini-jack -37 dBV (MIC ATT ON), -57 dBV(MIC ATT OFF) (with 600 ohm mic)/5 kohms or more
Operating temperature	32 - 104° F (0 - 40° C)
Dimensions	2.0 x 4.6 x 4.0 in. (52 x 118 x 102 mm)
Weight	15.9 oz. (450 g)

System requirements for supplied software:

Digital Video Software

Interface: USB: only preinstalled Windows 98/Windows Me/Windows 2000/ Windows XP systems with built-in USB ports, or only systems equipped with genuine Apple-brand built-in USB interfaces.

Operating System		CPU	RAM
Windows	Windows 98/ Windows Me/ Windows 2000	150MHz or better	64MB or more
	Windows XP	300MHz or better	128MB or more
Macintosh	Mac OS 9.0–9.2	PowerPC	64MB or more
	Mac OS X (v10.1/v10.2)	PowerPC	128MB or more

Free hard disk space		
Windows	ZoomBrowser EX	120MB or more
	PhotoStitch	40MB or more
	DV TWAIN Driver	25MB or more
	DV WIA Driver	25MB or more
Macintosh	ImageBrowser	50MB or more
	PhotoStitch	30MB or more

DV Network Software

Interface: USB or IEEE1394: only preinstalled Windows XP Home Edition or Windows XP Professional systems with built-in USB or IEEE1394 terminal

CPU	500 MHz or better (800 MHz or better recommended)	
RAM	128 MB or more (256 MB or more recommended)	
Free Hard Disk Space	DV Messenger2	100 MB or more
	Canon USB Video Driver	1 MB or more
	AV/C Camera Storage Subunit-WIA Driver	1 MB or more
Other	Windows Messenger Version 4.5/4.6/4.7	

- To use DV Messenger2, it is required that Windows Messenger 4.5/4.6/ 4.7 operates correctly.
- It is required that Windows Messenger operates and the voice or video conversation can be used with a digital camcorder. Please consult Microsoft for details.
- If you are using a router, make sure it is an UPnP (Universal Plug and Play) compatible router. For details, consult your Internet service provider, telephone carrier, or refer to the manual of the router.
- We recommend using a broadband Internet connection.
- The communication quality and connectivity depend on the congestion of the Internet line and service.
- This product does not guarantee a certain communication quality.

THE CANON OPTURA 300 KIT

- OPTURA 300
- BP-407 Battery Pack
- CA-570 Compact Power Adapter
- WL-D81 Wireless Controller
- S-150 S-video Cable
- STV-250N Stereo Video Cable
- SDC-8M SD Memory Card
- IFC-300PCU USB Cable
- DIGITAL VIDEO SOLUTION DISK (For Windows, For Macintosh)

MPEG-4 Visual Consumer Recorded Video Decoders and/or Encoders
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